



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,501	02/10/2004	Olivier Marce	Q79715	8707
23373 7590 02/25/2008 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER CHO, HONG SOL	
			ART UNIT	PAPER NUMBER
			2619	
			MAIL DATE	DELIVERY MODE
			02/25/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/774,501

Applicant(s)

MARCE ET AL.

Examiner

Hong Cho

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2008 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. This office action is in response to the amendment filed on 01/10/2008. Claim 5 is canceled. Claims 1-4 and 6-11 are pending in the instant application.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 10 and 11 are rejected under 35 U.S.C. 101 because the claimed invention, data packet, is directed to non-statutory subject matter.

### ***Claim Rejections - 35 USC § 112, First paragraph***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 9 is rejected under 35 U.S.C. 112, first paragraph, as a single means claim.

Re claim 9, it is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. For example, claim 9 recites an active node and some of the functions of the active node but nothing else. See MPEP 2164.08(a) and *In re Hyatt*, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983).

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(e) that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-4 and 7-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Wang (US 6693912).

Re claims 1, 4 and 9, Wang discloses an active gateway (*an active node* as in claim 9) receiving an active packet, performing QoS mapping as specified in an active packet (*executing of a request contained in the active packet to configure packet processing functions*, column 3, lines 14-20), and performing QoS management operations by running a program specified in an active packet (*processing of data packets by executing a program, contained or identified in an active packet, to control data*

*packet processing functions*, column 3, lines 34-36), this program being executed after the execution of this request (column 3, lines 28-33). Wang discloses transmitting an active packet to a neighbor active gateway after running a program in the packet (*active packet should be sent to an network address after the executing of the request contained in the active packet*, column 4, lines 31-35).

Re claim 2, Wang discloses putting a packet filter in a router (column 3, lines 49-51).

Re claim 3, Wang discloses checking the safety of an active packet before carrying out QoS mapping according to the execution results of the program in the packet (*the receipt and storage of packets corresponding to the filter, for at least as long as step c has not been implemented*, column 3, lines 49-55).

Re claim 7, Wang discloses reading QoS mapping information from an active packet (*including an operation for reading, from the active packet, the parameters for running the program in step b*), figure 6; column 4, lines 7-14).

Re claim 8, Wang discloses extracting a program from an active packet (*including an operation for the downloading of a program identified in the active packet in step c*), column 4, lines 16-17).

Re claim 10, Wang discloses an active packet with QoS mapping request (*a request to be executed in an active node contained in the active packet to configure packet processing functions*, column 3, lines 14-20), and QoS mapping methods in a form of a program specified in an active packet (*processing of data packets by executing a*

*program, contained or identified in an active packet, to control data packet processing functions, column 3, lines 34-36), this program being executed after the execution of this request (column 3, lines 28-33).*

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Pang et al (US 20030112758), hereinafter referred to as Pang.

Re claim 6, Wang discloses all of the limitations of the base claim, but fails to disclose dimensioning of a packet storage queue. Pang discloses determining the size of buffer based on packet delays (paragraph [0055], lines 1-5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Wang by adding to it the feature of determining optimal buffer size for the benefit of providing minimal packet loss along with less packet delay without being substantially resource intensive.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Ma (US 7123620).

Re claim 11, Wang discloses all of the limitations of the base claim, but fails to disclose putting a program or a program identifier and request in the optional fields of the IP packet header. Ma discloses inserting global path identifier in the optional field of an IP packet header (column 6, lines 27-29). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the packet format of Wang so that a program or a program identifier and request would be inserted in the optional fields of the IP packet header for the benefit of carrying upper layer protocol data units in the payload.

#### ***Response to Arguments***

10. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Cho whose telephone number is 571-272-3087. The examiner can normally be reached on Mon-Fri during 7 am to 4 pm.

Application/Control Number:  
10/774,501  
Art Unit: 2619

Page 7

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*hc*

Hong Cho  
Patent Examiner  
2/7/08